

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY – PULASKI

2019 Governor's Investment in Technical Education (GIVE)

Welding Program Expansion – Giles County

Fiscal Agent: Tennessee College of Applied Technology – Pulaski

IN PARTNERSHIP WITH

Giles County Economic Development Commission (Workforce/Economic Development Agency)

Tennessee College of Applied Technology – Pulaski (Higher Education Institution)

Giles County School District (LEA/School District)

Craig Manufacturing, Diverse Fabrication LLC, Marelli (Calsonic Kansei, Lewisburg), Talos Engineered Products (Employer Partners)

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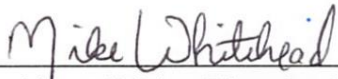
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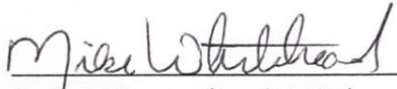
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Funding Requested: \$310,146



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Abstract

Tennessee College of Applied Technology – Pulaski (TCAT-P) is requesting \$310,146 to expand its welding program and to expand its current Work Based Learning (WBL) programming to provide more systematic and personalized experiences throughout the entire WBL continuum. Our proposal is responsive to both supply and demand needs in the local area; to Drive to 55 goals; and to WBL program enhancements. Our program is sustainable because it increases program capacity, which will then be supported by revenues from additional students.

The funds will be used to purchase 8 additional welding machines and booths, to hire an additional adjunct faculty member, and to fund a WBL coordinator. We have a disciplined and thoughtful program for recruiting women and minority students into the program.

The ramp-up time for the proposed program is relatively short because most programmatic elements are already in place. We anticipate being fully operational with the expansion in time for the Fall 2020 trimester.

The current program is at full capacity and prospective students are being turned away. This is especially true of dual enrollment high school students, because of time constraints inherent in their scheduling. Because of timing considerations the modest expansion in equipment from 20 to 28 training machines and booths and the addition of one adjunct faculty member will allow us to increase from current production of 45 welders per year to 63 welders per year.

Our welding program is extremely successful, with adult completion rates at 90%, and employment rates immediately after program completion at 91%. These bespeak strong student engagement. Our methods for continuing success in student engagement are discussed in the proposal.

The shortage of welders in our local area is more severe than in Tennessee state-wide. In August, 2019, we conducted a survey of employers in Giles and contiguous counties and found that 14 responding companies currently have 61 openings for welders. The TCAT-P staff estimates that the 14 employers represent between 40% and 60% of all welding jobs in the local area, so a mid-point estimate of current need is about 120. The South Central Region is especially welding-intensive, with a location quotient (LQ) for welders of 1.9, while Tennessee's LQ is 1.2, and by definition, the LQ for the country as a whole is 1. This translates to 5.14 welders per 1000 jobs in our area, compared to 3.23 per 1000 jobs in Tennessee, and 2.69 per 1000 jobs in the US in general. Welding is a key occupation for two of Tennessee's most important industry clusters – Automotive and Aerospace/Defense. Supporting the needs of important industry clusters is essential to Tennessee's economic success and competitiveness.

We are in the unique position of having unmet demand for the program on the student side, and unmet demand for the program's output on the employer side. We have a proven successful program which will be expanded and enhanced by the GIVE grant.

I. Demonstration of Need

Alignment with Drive to 55 Goals

The expansion of the welding program will increase higher education attainment from 45 graduates per year to an estimated 63 per year. The complete welding sequence is 3 trimesters long, resulting in 3 certificates and a diploma, all of which meet Drive to 55 post-secondary credential criteria.

Drive to 55 aspires to equip 55% of Tennesseans with a college degree or certificate by 2025.

Giles County lags the state in post-secondary accomplishment. Only 20.7% of Giles County adults have an Associate's of Arts degree or higher in Giles County, while statewide this figure is 31.5% (Tennessee Education Commission and Tennessee Student Assistance Corporation, 2017). Drive to 55 will not attain its worthy goal without lifting the counties like Giles that have below average educational attainment.

Welders are listed as a key occupation for both Tennessee's emerging Aerospace and Defense Cluster and the Automotive Industry Cluster. Southern Middle Tennessee is especially rich in Automotive Industry companies (Center for Economic Research in Tennessee, 2018) (Center for Economic Research in Tennessee, 2019). In fact, Giles County has the highest concentration of automotive industry employment for steering and suspension components of any county in the entire United States (Center for Economic Research in Tennessee, 2019, p20).

Localized Need Demonstration

The shortage of welders is well documented nationally, state-wide, and locally.¹ According to



Figure 1: Growth in Demand for TN Welders vs. All Occupations

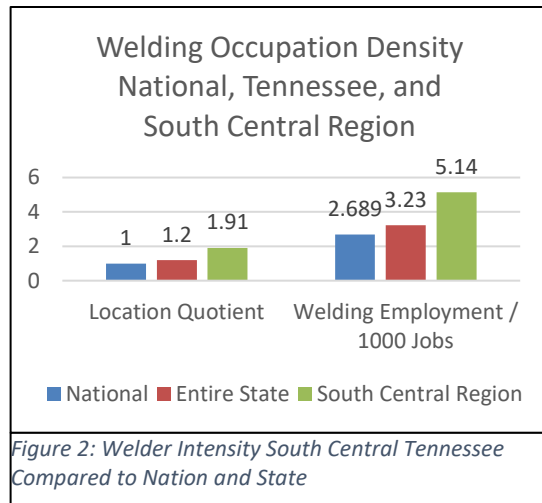
current Bureau of Labor Statistics (BLS) Occupational Employment Statistics (OES), the short term occupational growth rate for welders in Tennessee is almost twice that for all occupations in Tennessee (Bureau of Labor Statistics). The Tennessee Higher Education Commission 2019 Annual Report on Academic Supply and Occupational Demand shows welders

being in shortage in all 9 of the state regions (Tennessee Higher Education Commission, 2019).

Long term projections show that between the years 2016 and 2026, Tennessee will have an average of 820 new openings for welders per year (Bureau of Labor Statistics). Yet the production of new welders through TCATs and CTE courses of study falls far short of demand. Twenty-five TCATs have welding programs. Many produce 20 or fewer students per year. Consequently, we estimate that the TCATs' collective production of welders is no more than 500 per year.

Locally, our need for welders outpaces that of the state or nation. A much higher proportion of our workforce are welders. Our location quotient (LQ) for welders in the South Central Region is almost twice that of the nation, and 60% higher than the state as a whole. 5.14 jobs out of every 1000 in our region are welding jobs, compared to 2.7 nationally, and 3.2 state wide.

¹ For quantitative analysis of welder supply and demand, we use the 2018 Standard Occupational Code for Welders, Cutters, Solderers, and Brazers, SOC 51-4121. For analysis of related programs of study, we use the 2000 Classification of Instructional Programs for Welding Technology, Welder, CIP 48-0508.



The welder shortage revealed in this analysis is loudly echoed by area employers. In August 2019, we surveyed businesses in Giles and contiguous counties who employ welders (“local area”). Fourteen area employers responded, and indicated that their businesses currently had unfilled openings for 60 welders.² Welding faculty at TCAT-P estimate

that the respondents account for 50% of all welding jobs in the local area, with an upper bound

LOCAL AREA DEMAND FOR WELDERS				
% of Welding Jobs Represented by Survey Respondents	Current Job Openings	Lower Bound 3-5 Year Need	Most Likely 3-5 Year Need	Upper Bound 3-5 Year Need
40%	149	498	638	775
50%	119	398	510	620
60%	99	332	425	517

Figure 3: Local Area Demand for Welders - Current and Forecast

of 60% and a lower bound of

40%. Scaled to all welder

employers within the local

area, we estimate that there

are current unfilled openings for 99 – 149 welders. Needs increase dramatically when

employers report their forecast demand for new welders three to five years out. These

fourteen employers estimate a need of 199 – 310 new welders in that time frame, accounting

for business growth and natural attrition of their current workforce. When scaled to all welder-

employing companies in Giles and contiguous counties, we estimate that the demand for new

² Our data contrast to estimates produced by THEC showing 37 current openings for the entire region, and to BLS data that indicate fewer jobs than we estimate. This discrepancy may be due to a combination of factors that might include openings that are not posted in sources used for THECs or BLS count, possible imputation procedures that assume equal statewide LQs, forecasting procedures that may be more linear than the growth our area is actually experiencing, and timing differences in the data collection period. We are confident that our more current direct survey of area employers represents a reliable estimate of current and anticipated demand.

welders over the next three to five years is 332 – 775, with the most likely need being 510. The survey and the responses and detailed estimate methodology is shown in Exhibit A.

This shortfall of supply may discourage relocation and expansion by welding-intensive companies, taking not just welding jobs, but all jobs out of our economic development path.

Exhibit B contains supporting letters from major local employers stating that the proposed program is aligned with their demand for unfilled and anticipated future welder requirements, and meets their credential requirements. Exhibit C contains letters from the Giles County Economic Development Commission and the Economic Development Executive Director in Lewisburg supporting the magnitude and significance of the welder shortage in our area.

Living Wage

The MIT Living Wage Calculator for Giles and its contiguous counties indicates a population-weighted living wage of \$10.32 per hour (Massachusetts Institute of Technology, n.d.). BLS

Living Wage vs. Welding Wage		
	MIT Living Wage for Single Adult	Population
Giles	\$9.95	29,503
Lawrence	\$9.88	43,734
Lincoln	\$9.95	34,117
Marshall	\$10.50	33,683
Maury	\$10.72	94,340
Total		235,377
Population-Weighted Living Wage	\$10.32	
BLS Regional Median Welder Wage	\$19.89	
BLS Regional Mean Welder Wage	\$21.33	
Local Starting Welder Wage	\$15.00 - \$18.00	
Local 90-Day After Hire Welder Wage	\$22.00	

Figure 4: Living Wage for Local Area Compared to Welder Wage

reports mean and median wages for welders for the South Central Region, shown below. The TCAT welding faculty provided current rates actually being offered locally to new credentialed graduates of their program at the time of hire (probationary), and in 90 days of being hired, after a successful probationary period.

Compared to the Living Wage rate, local probationary wage rates are about 50% higher, while local permanent hire rates, mean BLS rates, and median BLS regional rates are about double.

Welder Wage Compared to All Regional Occupations Wage	
BLS Regional Median Wage All Occupations	\$15.34
75% of Regional Median Wage	\$11.51
BLS Regional Median Welder Wage	\$19.89
BLS Regional Mean Welder Wage	\$21.33
Local Starting Welder Wage	\$15.00 - \$18.00
Local 90-Day After Hire Welder Wage	\$22.00
<i>Figure 5: Welder Wage Compared to 75% of All Occupation Wage</i>	

The effective rates for welders also compare very favorably with the regional wage for all occupations. Even beginning welder wages exceed 100% of the regional wage for all occupations.

II. Program Plan

This section presents the project timeline, objectives, governance plan, plan for recruitment of underrepresented populations, WBL enhancement plan, ethics programming, and faculty professional development plans.

Project Timeline and Overview

The project is structured to be fully implemented by Fall 2020. The primary planning and implementation areas are:

- Space preparation and equipment ordering and installation;
- Planning and implementing expanded WBL programs;
- Marketing the program through High Schools (dual enrollment) and with adults, and hiring and onboarding additional required faculty.

The timeline is shown below. Detailed lists of critical meetings and measurable objectives are shown in Exhibit D.

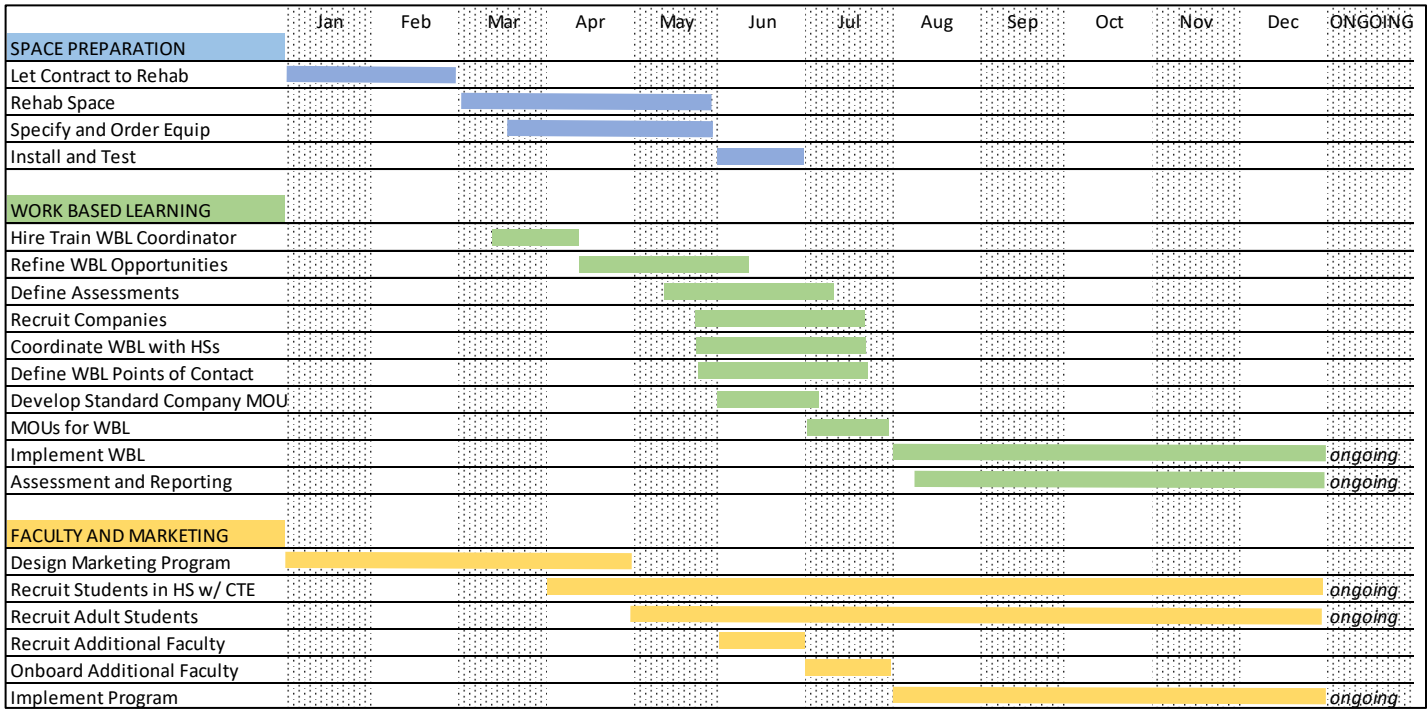


Figure 6: Project Timeline

Alignment of Workforce Data and Drive to 55 Goals

The grant activities are directly related to three focal points: responsiveness to alleviating the severe workforce shortage for qualified and credentialed welders; adding significantly to the attainment of Drive to 55 goals by providing post-secondary credentials where employers have a profound need; and enhancing program attractiveness and workforce transition by instituting Work Based Learning across the entire WBL continuum.

The welding programs offer four credentials, all of which meet post-secondary criteria for Drive to 55 purposes. A full time student attending three trimesters receives three certificates plus a Combination Welding Diploma.

	Current Capacity and Production	Capacity and Estimated Production With Expansion
Machines	20	28
Full Time Adults*	38	45
% of Adults Completing	90%	90%
Number of Adult Completers	34	41
Dual Enrolled (DE) HS Students	14	28
Number of DE Completing with 3 Certificates and Diploma	3	6
Number of DE Students Continuing in Program	4	8
Number of DE Students Graduating and Continuing as Adults	4	8
Total Expected Number of DE Students Completing	11	22
DE Completion Rate	79%	79%
Total Production of Welders	45	63

*Note: Number of adults in Expansion has been reduced from potential capacity of 48 to 45 due to capacity being taken by 6 graduating HS DEs continuing on to completion as adults, assumed to be halfway through their program

Figure 8: Capacity Expansion and Increase in Welders Produced

Demand	Need	Percent of Demand
510 over 3 years	170	37%
510 over 4 years	128	49%
510 over 5 years	102	62%

Figure 7 Percent of Demand Satisfied by Expanded Supply

The welding program's production will be increased from its current 45 graduates to 63 graduates. The estimated local unmet employer demand for new welders is close to this new capacity. Over three to five years, the most likely hiring demand locally is estimated at a total of 510. We estimate that the new supply will satisfy between 40% and 60% of local demand, depending on the time frame that the surveyed employers had in mind when answering the question. There is low likelihood that the expansion would oversupply the

market or drastically undersupply the market. Oversupply could result in decreased wages, while undersupply might result in companies relocating jobs to a market with a more favorable supply of welders. We believe that our proposed expansion is correctly calibrated to market demand and supply of potential students.

Objectives for Student Engagement

The welding program at TCAT-P has a completion rate of 90%, and a hire rate for graduates of 91%. These rates are indicative of high student engagement.

TCAT-P has innovatively engaged students by bringing in real-life projects for students to work on, incorporating elements of service learning (learning connected to social and community benefit).

Participation in SkillsUSA competitions has created pride and engagement. The program has been awarded the coveted National Model of Excellence designation for the last two years, a feat rivaled by only one other TCAT.³

Additionally, instructors are highly engaged with their students through several mechanisms:

- One-on-one instruction;
- Counseling throughout the program.
- Taking students on industry visits and shop tours;
- Informing students of job opportunities;
- Assisting students in job placement;
- Advising students about different industries and career paths.



Figure 9: Student Engaged in Service Learning at Giles County Solid Waste

Example Service Learning Live Student Projects

- Fabricating and installing collapsible seating, handrails, and step bumper for the Pulaski Police Department van;
- Repairing bunks at the Giles County jail;
- Fabricating doors and shelving, and cutting out and installing windows in shipping containers for a Giles County Solid Waste recycling center;
- Modifying water tanks for Giles



Figure 10: TCAT-P 2019 SkillsUSA National Models of Excellence Display

³ National Model of Excellence is awarded to only 24 chapters nationally, chosen from among over 2000 institutions that have achieved Gold chapter status.

Continuous monitoring is crucial to provide early warning signs of disengagement. Measures of student engagement include class attendance, successful completion of assignments, and successful participation in WBL activities. TCAT-P triggers an intervention when needed. The nature of the intervention is dependent on the specific situation and may, for dual enrolled students, involve HS faculty and guidance counselors. Attentive and caring faculty contribute to the student's ability to complete the program.

AWS	Award Type	Clock Hours
Shielded metal Arc Welder	Certificate	432
Gas Metal Arc Welder	Certificate	864
Gas Tungsten Arc Welder/Combination Welder	Tungsten Arc Welder Certificate Combination Welder Diploma	1296

Figure 11: Welder Certificates and Diplomas

The three trimester program offered by TCAT-P provides four separate credentials – three certificates and a diploma, with course work that is accredited by the American Welding Society (AWS). The adjacent table shows what

credential is earned in each trimester of the program, and the cumulative clock hours attained at each level. The first and second trimesters offer early post-secondary opportunities that are valued in the workplace and enhance the workforce qualifications within Tennessee. Almost all students complete the entire 3 trimester program and receive a diploma.

Recruitment of Underrepresented Groups

TCAT-P has recently hired an experienced full-time recruiter. The recruiter has initiated several powerful recruiting programs for attracting underrepresented groups into the welding program:

- Marketing materials will visually represent diversity through photos;

- Women and minority alumni of the welding program will be invited to participate in round table luncheons and discussions to generate ideas about how better to recruit other women and minorities;
- Women and minority alumni will be presented in videos on the TCAT-P website, talking about the welding program and their careers;
- Women and minority welding alumni, and the high wages and employer demand, will be showcased in a luncheon and facility tours for area high school guidance counselors, CTE directors, and CTE faculty;
- TCAT-P will partner with American Job Centers in communities within its catchment area to educate career counselors about the welding program and the opportunities it represents, and provide program materials to be available at the American Job Centers;
- TCAT-P will work with NAACP chapters to highlight the program and its benefits.

Project Governance and Accountability Plan

The Project Director will be Mike Whitehead, who is also President of TCAT-P. Other members of the Steering Committee are: Josh Hughes, Welding Instructor; Robert Alford, Coordinator of the Evening Program; Amy Roberts, CTE Director of the School District; David Hamilton, Executive Director of the Giles County Economic Development Commission; and industry representatives Les Harding (Craig Manufacturing), and Julie Roberts (Clarage/Twin City Fan, Inc.) The Steering Committee will meet frequently during the first year of the grant, in order to keep the many project elements on schedule, and to make policy decisions where needed. Our experience with the LEAP Grant and similar grants tells us that when the program launches, and at key milestones in its implementation, meetings may be as frequent as bi-weekly, with fewer meetings later on. Once the program is implemented, the Steering Committee will meet as needed, but no less frequently than quarterly.

Structure of the Work-Based Learning Program

TCAT-P already has many elements of WBL in place at every stage of the WBL Continuum.

Under the grant, WBL can be expanded and enhanced, with close coordination with the high schools to ensure that the programs meet the criteria for WBL as articulated in the Tennessee State Board of Education High School Policy 2.103, as implemented through protocols provided in the WBL Toolbox. These protocols will provide a more formalized structure, communications with workplace mentors, instruction that meets WBL Framework requirements, and documentation and assessment related to student work. Internships, apprenticeships, and

cooperative learning will be credit-bearing.

The adjacent table shows how robust TCAT-P's WBL platform already is.

TCAT-P already has employer partners and processes for managing the WBL experiences that it provides. The fuller implementation of WBL is therefore incremental and manageable within the timeline.

Type of Opportunity	Currently Done	Additional Enhancements Planned with Grant
Industry and Career Awareness	Plant Tours Career Fairs	Expanded Number and Variety of Opportunities Enhanced Measurement and Assessment
Career Exploration	One-on-One or Small Group Interactions With People In Plant Tours Guest Speakers	Job Shadowing Expanded Number and Variety of Opportunities Enhanced Measurement and Assessment
Career Preparation	Real World Projects Working With Community Entities (Service Learning) 2-4 Week Internships with Partner Companies	Expanded Number and Variety of Opportunities Enhanced Measurement and Assessment
Career Training	2-4 Week Internships with Partner Companies	Apprenticeships and Cooperative Learning Expanded Number and Variety of Opportunities Enhanced Measurement and Assessment

Figure 12: TCAT-P Current and Planned Work-Based Learning

TCAT-P incorporates a credit-bearing work ethic course of study into each trimester. The program was developed in conjunction with the Tennessee Board of Regents, and incorporates

progressive measurable goals. Work ethic is an essential characteristic of successful welding graduates.

TCAT-P supports its faculty in professional development. Evolving technology, the changing nature of welding activities in our region, and changing employer needs require that faculty stay up to date professionally. Faculty participate in bi-monthly facility-wide Professional Learning Communities which focus on instructional philosophy, teaching strategies, and resources. The welding faculty also participate in a week-long in-service training program with TBR for curriculum planning. TCAT-P is reimbursing tuition and supporting the current welding faculty in attaining a post-secondary degree, and also pays for his maintaining his professional credentials, the CWI (Certified Welding Inspector) and CWE (Certified Welding Educator). Additionally, the TCAT-P welding faculty are in constant communication with area employers to keep up with their changing needs.

The GIVE Project Leader, Mike Whitehead, is a member of the Marshall County Advanced Manufacturing Council (MCAMC), and is in close contact with employers in the area as well. His presentation to the MCAMC spurred Marshall County to focus on increasing welder education in their high school.

Role of Proposed Equipment Request

The proposed equipment is essential to the expansion of the program and the production of more welders. The equipment requested meets or exceeds equipment currently being used

Equipment	Number
Multi-process Miller XMT350 Welding Machines Capable of Stick, MIG, DC TIG, and Air Carbon Arc Gouging	6
Miller Dynasty 400 Welding Machines Capable of Stick and TIG (DC and AC)	2
Clean Air America Self-Ventilating Booths	8

Figure 13: Equipment to be Purchased

by industry, and consequently will perform well for the foreseeable future. All equipment is on the recommended Career Cluster Equipment List.

III. Strength of Partnerships

The roles of the mandatory partners, and their qualifications for their roles, are as follows:

- TCAT-Pulaski is both the fiscal agent and the lead entity delivering the proposed program. Key people at TCAT-P are Mike Whitehead, Project Leader; Josh Hughes, Welding Faculty; and Vickie Odeneal, Fiscal Control. As lead entity, TCAT-P will be responsible for coordinating all grant activities, managing partner participation, reporting, and contract monitoring. As the implementing agency, TCAT-P will be responsible for expanding and implementing this proposed program. As the fiscal agent, TCAT-P will execute the grant contract with THEC, and will oversee all budgetary aspects of the grant. TCAT-P has successfully administered many grants in the past, and will continue to deliver excellence in this role.
- The partnership will include Selina Moore, South Central Tennessee Development District (SCTDD); and David Hamilton, Director, Giles County Economic Development Commission (GCEDC). SCTDD has worked in concert with THEC institutions on numerous grants and workforce development initiatives. SCTDD operates American Job Centers throughout the region, and helps connect employers with employees. GCEDC is responsible for bringing new jobs to Giles County through relocations, expansions, and start-ups. Both of these partners are essential to providing information and outreach to area employers. Additionally, SCTDD will play an important role in recruiting adult students through its American Job Centers.
- The Giles County School District will provide and help coordinate the dual enrollment students, and will ensure that the WBL programs meet state standards for secondary school students. Amy Roberts, the CTE Director for the Giles County School District will be the representative of the School District.

- Employer Partners will be Craig Manufacturing USA, Diverse Fabrication, LLC, Marelli (Calsonic Kansei North America), and Talos Engineered Products, Inc. We expect additional partners to join. Together, these valued employer partners provide a range of company sizes, industries, and welding applications. All have employed TCAT-P students, and are already engaged in WBL activities ranging from plant tours to internships. Employers are eager to participate in programs with TCAT-P to foster expansion of the supply of welders, and to hire WBL students.

MOUs with the partners are included in Exhibit E.

IV. Budget Plan

Alignment of Budget Plan to Grant Activities

The budget plan is directly aligned with the grant activities. Equipment and rehab expenses directly support the expansion of the welding program, as does the hiring of an additional faculty member. The WBL coordinator expense directly supports the development of WBL opportunities, and the coordination, supervision, measurement, and assessment of outcomes.

The indirect cost line of the budget supports the activities of TCAT-P as fiscal agent, grant reporting, project evaluation, and assessment. The budget templates and line items are shown in Exhibit F.

V. Sustainability

The grant will support one-time expenses such as the rehab of the space; the purchase of equipment; the implementation of the plan to expand enrollment; and the expansion of and enhancements to WBL.

By the end of the grant period, increased revenues due to increased enrollment will sustain the program financially. Activities supported by increased revenues are:

- Repair and maintenance of new equipment;
- Support of additional faculty;
- Support of WBL administrator;
- Administration of WBL;
- Ongoing activities with increased numbers of employers;
- Ongoing program marketing and enrollment activities.

The partners and steering committee are committed to meeting beyond the 30-month duration of the grant. The serious ongoing welder shortage motivates all parties to have the program succeed well past the duration of the grant. Many of these parties are in frequent communication with each other already, so continuation of the steering committee simply creates a more structured framework mechanism to continue what they are already doing.

The more intensive WBL is, the more likely the provider of the WBL is to be successful in hiring the WBL students once they graduate. The students who do WBL with an employer on-board faster and are likely to stay longer than new hires who did not experience WBL with the employer. Thus, the incentives for employers to continue to engage in WBL are significant.

VI. Economic Status Acknowledgement

Neither Giles County nor the contiguous counties of Lawrence, Lincoln, Marshall, or Maury are distressed or at risk. However, educational attainment in all counties except Maury is lower than educational attainment in Tennessee in general. Lifting up low-performing counties is essential if the state is to meet its Drive to 55 goal.

References

- Bureau of Labor Statistics. (n.d.). *Employment Projections*. Retrieved August 28, 2019, from <https://data.bls.gov/projections/occupationProj>
- Bureau of Labor Statistics. (n.d.). Occupational Employment Statistics for May 2018. Retrieved August 25, 2019, from <https://www.bls.gov/oes/current/oes514121.htm#nat>
- Center for Economic Research in Tennessee. (2018). *Tennessee's Aerospace and Defense Cluster*. Retrieved August 28, 2019, from <https://tnecd.com/wp-content/uploads/2019/05/Aerospace-and-Defense-Research-Paper-8-23-2018.pdf>
- Center for Economic Research in Tennessee. (2019). *Tennessee's Automotive Cluster*. Retrieved August 28, 2019, from https://tnecd.com/wp-content/uploads/2019/05/Automotive-Research-Paper_01-2019-1.pdf
- Massachusetts Institute of Technology. (n.d.). *Living Wage Calculator*. Retrieved August 20, 2019, from <http://livingwage.mit.edu/states/47/locations>
- Projections Central. (2019, April 25). 2018-2020 Projections. Retrieved 8 25, 2019, from <https://projectionscentral.com/Projections/Download>
- Tennessee Education Commission and Tennessee Student Assistance Corporation. (2017). *Higher Education County Profile - Giles County*. Retrieved August 25, 2019, from DriveTo55.org: <http://driveto55.org/county/Giles.pdf>
- Tennessee Higher Education Commission. (2019). *Academic Supply and Occupational Demand in Tennessee - 2019*. Retrieved August 28, 2019, from <https://www.tn.gov/content/dam/tn/thec/bureau/research/other-research/supply-demand/2019%20Academic%20Supply%20and%20Occupational%20Demand%20Report.pdf>

Exhibit A – Local Demand Survey – Giles and Contiguous Counties



Welding Industry Needs Survey

TCAT-Pulaski has applied for a G.I.V.E. grant from the governor's office to expand our Welding program training capacity by adding more booths and machines. State industry trend data is not showing as much of a need for welders statewide as we are seeing in our area. Please complete the survey below to help us justify the need for welding training capacity expansion. Your answers are for our grant writing purposes only. Your answers do not commit you to any employment obligations, etc. All information will be aggregated for the grant narrative. Thank you! --Mike Whitehead, President (TCAT-Pulaski)

1. How many welders (experienced and student) could you hire TODAY if they were available?

2. What do you anticipate your welder needs to be in the next 3-5 years considering turnover, retirement, company growth?

- ☐ 5-10
- ☐ 10-20
- ☐ 20-30
- ☐ 30+
- ☐ Other (please specify)

3. List your company name & location.

Done

Powered by
 SurveyMonkey
See how easy it is to [create a survey](#).

Below are the responses from the survey (individual company names redacted), along with calculated estimates of lower, most likely, and upper bound estimates for the 3-5 year demand for welders.

Welding Industry Needs Survey (August 2019)

Company name & location.	Employer Responses		Current Need			3 - 5 Year Need		
	How many welders (experienced and student) could you hire TODAY if they were available?	What do you anticipate your welder needs to be in the next 3-5 years considering turnover, retirement, company growth?	Lower Bound	Most Likely	Upper Bound	Lower Bound	Most Likely	Upper Bound
[REDACTED] Pulaski TN	3	20-30	3	3	3	20	25	30
[REDACTED] Lawrenceburg, TN	6	20-30	6	6	6	20	25	30
[REDACTED] Lawrenceburg TN	4	30+	4	4	4	31	35	40
[REDACTED] Lawrenceburg TN	4	5-10	4	4	4	1	7.5	10
[REDACTED] Fayetteville, TN	10	10-20	10	10	10	10	15	20
[REDACTED] Columbia, TN 38401	5	10-20	5	5	5	10	15	20
[REDACTED] Lewisburg TN	5	30+	5	5	5	31	35	40
[REDACTED] Pulaski TN 38464	5	10-20	5	5	5	10	15	20
[REDACTED] Lewisburg TN	3	30+	3	3	3	31	35	40
[REDACTED] Columbia TN	12	20-30	12	12	12	20	25	30
[REDACTED] Columbia, TN 38401	1-2	5-10	1	1.5	2	5	7.5	10
[REDACTED] Lewisburg, TN	1	15	1	1	1	10	15	20
Total			59	59.5	60	199	255	310

Range answers are estimated at the lower end of the range for lower bound, the midpoint of the range for most likely, and the upper end of the range for upper bound. Those answering >30 are estimated at 31 (lower bound); 35 (likely); and 40 (upper bound)

Figure 14: Survey of Local Employers' Welder Demand

Below are the estimates for total local (Giles and contiguous counties) new demand for welders, based upon TCAT-P opinion that the respondents to the survey represent 50% of all welding job hires, with a lower bound of 40% and an upper bound of 60%.

Total Local Estimates				
Respondents % of All Welder Jobs	Current Need	3-5 Year Lower Bound	3-5 Year Most Likely	3-5 Year Upper Bound
40%	149	498	638	775
50%	119	398	510	620
60%	99	332	425	517

Figure 15: Estimate of Total Local Area Welder Demand

Exhibit B - Letters Supporting Alignment of Program with Needs

Letters from:

Tonja Garrett, Chief Operating Office, South Central Tennessee Workforce Alliance

Selina Moore, Regional Director, Workforce Services Division of Tennessee Department
of Labor and Workforce Development



September 5, 2019

To Whom It May Concern:

The South Central TN Workforce Alliance is pleased to offer its support and partnership for TN College of Applied Technology (TCAT) Pulaski's proposal for the GIVE (Governor's Investment in Vocational Education) Grant. Work Based Learning is a proven strategy that positively impacts the lives young people to bridge the gap between high school and high demand careers in business and industry.

In 2014, The South Central TN Workforce Alliance partnered with TCAT Pulaski to provide Internship opportunities for students enrolled in our Southern Middle TN region. The **TN LEAP Closing Gaps through Partnerships** project focused on filling the workforce pipeline in Production (Manufacturing) Pathways starting with the high schools.

We are proud to continue this successful partnership and plan to build upon and grow more Work Based Learning opportunities to students in our region through the GIVE Initiative.

Respectfully,

Tonja Garrett
Chief Operating Officer
South Central TN Workforce Alliance
5000 Northfield Lane, Suite 124
Spring Hill, TN 37174

5000 Northfield Lane, Suite 124 • Spring Hill, TN 37174
931.398.6000 • fax # 931.486.0033 • www.sctworkforce.org

Board Chairman – Robby Moore

South Central Tennessee Workforce Alliance/Administrative Entity

TTY # 931.388.3869



September 6, 2019

Tennessee College of Applied Technology-Pulaski
Mike Whitehead
1233 E. College Street
Pulaski, TN 38478

Dear Mr. Whitehead,

I would like to confirm our commitment to support TCAT-Pulaski's GIVE Grant proposal for expanding the welding program in Giles County to meet the workforce needs of the community/region. We understand your desire to recruit underrepresented groups into the welding program.

We can assist by establishing a partnership between TCAT-Pulaski and our American Job Centers where our career counselors will be educated about the welding program and the opportunities it represents. Welding program materials can also be made available at the American Job Centers.

We look forward to being a partner in this grant proposal.

Sincerely,

Selina Moore

Exhibit C – Supporting Material from Local Agencies Showing Analysis of Labor Market Trends or Needs Identified by Employers

Letters from

David Hamilton, Executive Director, Giles County Economic Development Commission

Greg Lowe, Director of Economic Development, City of Lewisburg



ECONOMIC DEVELOPMENT COMMISSION
PULASKI-GILES COUNTY TENNESSEE

P.O. Box 633
203 South First Street
Pulaski, TN 38478-0633

Phone: (931) 363-9138
Fax: (931) 424-3408

September 4, 2019

Mr. Mike Whitehead
President
TCAT-Pulaski
P.O. Box 614
Pulaski, Tennessee 38478

Dear Mike:

I am writing this letter in support of TCAT-Pulaski's GIVE Grant application to expand its' welding training program.

Pulaski and Giles County are fortunate to have good quality industries in our community, many of which utilize the welding training programs offered at TCAT-Pulaski. One of the biggest challenges we hear from our local industries is their ability to hire skill tradesmen, specifically welders. As a member of the TCAT Advisory Board, I have witnessed how the various programs offered at the TCAT, especially the welding program, provide well trained students for future positions in our local industries.

Not only are our industries looking for skilled welders, but our local Tool & Die shops, welding businesses, machining and fabricators are in need of well-trained welders to support their businesses. Many of our industries require welders in their process. Companies like Clarage, Richland LLC, Integrity Mold, Magotteaux, and NASG Stamping are always looking for additional welders to fulfill open positions in their plants.

Due to the demand and the shortage of available skilled welders, the Pulaski-Giles County Economic Development Commission fully supports TCAT-Pulaski's efforts to secure a GIVE Grant to expand its welding training programs. This expanded welder training program will be an asset not just for Giles County, but for the entire southcentral Tennessee region.

It is for these reasons we support TCAT-Pulaski's application for a GIVE Grant and would encourage you to vote in favor of awarding TCAT-Pulaski a GIVE Grant to expand its' welding training program.

Sincerely,

David Hamilton
Executive Director



September 4, 2019

Subject: TCAT-Pulaski GIVE Grant Application for Welding Programs

To Whom It May Concern:

As Director of Economic Development, I am authorized to proclaim that the City of Lewisburg is pleased to provide this letter of commitment to support TCAT-Pulaski and its GIVE Grant application in regards to expanding and increasing its Welding Training Capacity.

Lewisburg and Marshall County are blessed to have several Manufacturing Partners and many have expressed a real need to find quality welders. In fact, in our last Advanced Manufacturing Council meeting, one of the goals for 2020 is to better market welding training programs from our middle and high school technology training centers up through our Tennessee College of Applied Technology training centers. As automotive suppliers, machining, tool & die and metalworking are just some of our main industrial target sectors, the quality and availability of well-trained welders is essential to sustaining and growing our target sector base of employers.

Employers that have expressed a need for welders and support for increased welding training:

- **Multimatic** – Automotive Supplier with Traditional and Robotic Welder Needs
- **Talos Engineered Products** – Designer, Manufacturer and Installer of Conveyor Systems with Traditional Welder Needs
- **Walker Die Casting** – Aluminum Die Cast Manufacturer with Traditional Welder Needs
- **Teledyne** – Electronic and Microelectronic Manufacturer in Defense & Aerospace Industry with Traditional, Robotic and Specialized Welder Needs

These four employers represent more than 1,500 employees but only half of the companies that require quality, well-trained and abundant welders in Marshall County.

For these reasons above, the City of Lewisburg Economic Development supports Tennessee College of Applied Technology and its efforts to use the GIVE Grant to expand its Welding Training Capabilities for Marshall County and the South Central Tennessee Region.

I hope you will approve this grant request to improve the quality and availability of a much-needed workforce segment in South Central Tennessee.

Thank you.

Sincerely yours,

Greg Lowe – Director of Economic Development, City of Lewisburg

Exhibit D – Critical Convenings, Measurable Objectives

The project timeline shows key activities and timing required to meet the objective of implementation in time for the Fall trimester.

In this Exhibit, we show the critical meetings and measurable objectives that will bring this project to its planned fruition.

SPACE PREPARATION	
Critical Meetings	Week
Space Planner, Architect, and Estimator w/ Project Manager and Welding Instructor	1
Potential Contractor Walk Throughs and Q&A	4-5
Bid Reviews and Clarification with Architect and Project Manager	6-8
Ongoing Construction Management Meetings	9-21
Equipment Specification Discussion with Faculty and Area Businesses	10
Equipment Bid Reviews	21
Equipment Testing Sign Off with Faculty, Installer, and Project Manager	25
Measurable Objectives	
Space Rehab Bid Let On Schedule	
Number of Bids Meets Requirements	
Bids Within Estimates of Cost	
Bid Schedule Within Estimate of Schedule and Time	
Contractor Delivers Within Budget	
Contractor Delivers Within Schedule	
Equipment Specification Satisfies Industry Needs	
Equipment Specification within Budget	
Equipment Bids Let on Time	
Equipment Bids Within Schedule Delivery and Budget	
Equipment Delivered on Time	
Equipment Installed on Time	
Equipment Passes Testing on Time	

WORK BASED LEARNING	
Critical Meetings	Week
Develop Job Description for WBL Coordinator with Project Leader and Welding Faculty	8
Interviews with WBL Coordinator Applicants	12-14
Develop Additional WBL Opportunities w/ WBL Coordinator, Welding Faculty, Dual Enrollment HS, and Companies (multiple meetings)	14-27
Define WBL Assessments and Processes w/ WBL Coordinator, Welding Faculty, and Project Leader (multiple meetings)	18-28
Determine Participating Company Points of Contact w/ WBL Coordinator, Companies, and Faculty	20-28
Develop Needed MOUs w/ Project Leader, Coordinator, Companies	20-26
MOUs Signed with Companies (multiple meetings)	24-29
Measurable Objectives	
WBL Coordinator Hired On Time	
WBL Entire Program Mapped with WBL Continuum Covering All Step	
HS Agree to WBL for Dual Enrolled Students	
Target Number of Companies Recruited	
Recruited Companies Map to All Elements of WBL	
Requisite Number of MOUs Signed	

FACULTY AND MARKETING	
Critical Meetings	Week
Design Marketing Program and Materials With Project Leader, Faculty, Materials Designer, WBL Coordinator (when hired)	1-16
Presentations and Meetings with HS for Dual Enrolled Students, CTE Faculty and Staff, and Guidance Counsellors (multiple meetings)	12 and ongoing
Presentations and Meetings with Potential Adult Students, w/ Recruiters and Faculty	17 and ongoing
Interviews with Potential Faculty Hire, with Existing Faculty and Project Leader	21-24
Measurable Objectives	
Marketing Program and Materials Completed On Time	
Target HS Dual Enrollment Numbers Met	
Target Adult Enrollment Number Met	
Additional Faculty Hired on Time and in Budget	

Exhibit E - MOUs

Giles County Board of Education

Craig Manufacturing USA

Diverse Fabrication, LLC

Marelli (Calsonic Kansei North America)

Talos Engineering, Inc.

MEMORANDUM OF UNDERSTANDING
between
TENNESSEE COLLEGE OF APPLIED TECHNOLOGY – PULASKI
and
GILES COUNTY BOARD OF EDUCATION

This Memorandum of Understanding (MOU) sets for the benefits, roles, and responsibilities between the Tennessee College of Applied Technology Pulaski (TCAT-P) and the Giles County Board of Education (GCBOE).

Partner Name: Tennessee College of Applied Technology – Pulaski
Partner Representative: Mike Whitehead
Position: President
Address: 1233 East College Street, Pulaski TN 38478
Telephone: 931-424-2420
Email: mike.whitehead@tcatpulaski.edu

Partner Name: Giles County Board of Education
Partner Representative: Keith Stacey
Position: Assistant Director of Schools, Giles County School System
Address: 270 Richland Drive, Pulaski TN 38478
Telephone: 931-363-4558
Email: kstacey@gcboe.us

PURPOSE

The purpose of this MOU is to specify the respective partners' benefits, roles, and responsibilities with respect to the proposed GIVE grant to expand and enhance the welding program at TCAT-P.

GCBOE

Benefits. The GIVE-funded partnership and expansion of the welding program at TCAT-P will allow more secondary school students to explore careers in welding, to attain post-secondary credits and certifications through dual enrollment (DE), to participate in Work Based Learning (WBL), and to help the school system meet its requirements for Early Post-Secondary Opportunities (EPSOs).

Role. GCBOE's role will be to continue and expand its supply of dual enrolled students into the TCAT-P welding program, and to cooperate in the development and implementation of an expanded WBL offering for DE students.

Responsibilities. GCBOE's responsibilities under this partnership MOU will be to participate in the GIVE grant steering committee; participate in the enhancement, implementation, and assessment of WBL programming for DE students; and to provide opportunities for TCAT-P to expose students, HS faculty, and guidance counselors to the welding program.

TCAT-P

Benefits. The GIVE-funded partnership and expansion of the welding program at TCAT-P will allow TCAT-P to expand its pipeline of dual enrolled students and fulfill its mission of meeting employer demand with qualified and credentialed post-secondary graduates.

Role. TCAT-P's role under this MOU will be to expand the availability of DE opportunities for secondary institution students, to provide opportunities under the GIVE grant for WBL opportunities for these students, to provide awareness of the nature and benefits of the welding program to students, faculty and guidance counselors at the secondary level, and to implement initiatives that will result in the recruitment of underrepresented groups.

Responsibilities. TCAT-P's responsibilities under this MOU will be to continue and expand existing DE opportunities for secondary school students; work with GCBOE to design and implement WBL programming that meets the requirements of the GCBOE; coordinate and manage the GIVE grant steering committee; and deliver information to students, faculty, and guidance counselors regarding the nature and benefits of the welding program.

GIVE GRANT SHARED VISION

The partners have a shared vision of the importance and nature of the proposed program in providing career training in an occupation that provides excellent employment opportunities with earning potential well above average for the area. They also share a common understanding of the importance of meeting employer demand for qualified welders which is essential to the continued economic growth of the region. The partners have a shared commitment to the importance and goals of Drive to 55. The partners have a shared commitment to the importance of increasing the representation of underrepresented groups in this well-paying and in demand occupation.

DURATION

The duration of this MOU is for a period of 30 months from the execution of the GIVE grant.

SIGNATURES

Mike Whitehead
Mike Whitehead, President
Tennessee College of Applied Technology –
Pulaski
Date: 9/6/19

Keith Stacey
Keith Stacey, Assistant Director
Giles County School System
Date: 9/6/19

GCBOE(2)

Memorandum of Understanding
between
Tennessee College of Applied Technology-Pulaski
and
Craig Manufacturing USA

This Memorandum of Understanding (MOU) sets forth the terms and understanding between Tennessee College of Applied Technology-Pulaski (TCAT) and Craig Attachments who are providing services and/or support to the Governor's Investment in Vocational Education (GIVE) grant program.

Partner name: Tennessee College of Applied Technology-Pulaski
Partner representative: Mike Whitehead
Position: President
Address: 1233 East College Street, Pulaski, TN 38478
Telephone: 931-424-2420
E-mail: mike.whitehead@tcatpulaski.edu

Partner name: Craig Manufacturing USA
Partner representative: Les Harding
Position: Vice President – USA Manufacturing
Address: 408 Commerce Way, Ethridge TN, 38456
Telephone: 931.614.0440
E-mail: lharding@craigattachments.com

Purpose

The purpose of this MOU is to establish an agreement between the above mentioned parties concerning their respective roles and responsibilities for implementation of a GIVE grant project.

This agreement is to establish and coordinate joint processes and procedures for the provision of the GIVE program including the cultivation of potential industry partners, program promotion and marketing, and program evaluation.

GIVE Grant Program Vision and Overview

Since the MOU is intended to describe and detail how partners will contribute to the establishment and maintenance of the GIVE program, it is important that all partners to the MOU share a collective vision for the program and have a common understanding as to the scope and purpose of the program. The description provided under this section will serve as a critical framework for the program as it makes decisions on the implementation of the GIVE grant project:

Duties of Parties:

In this section, the responsibilities and agreements of each party are described separately:

For the lead agency, Tennessee College of Applied Technology-Pulaski, the responsibilities and agreements include:

- Serve as the fiscal agent for the grant;
- Provide needed support including office space, telephone use, and computer use for project staff;
- Provide classroom space and all other appropriate space to accommodate the program;
- Be responsible for purchasing necessary materials/supplies/equipment for designated components in accordance with the GIVE project budget;
- Support staff in trainings and professional development opportunities in areas related to programming and issues;
- Participate in the evaluation of the program at the local and state level;
- Complete paperwork related to any association with the program;
- Provide access to assessment and other available data for the purposes of program evaluation;
- Assist the program in developing, implementing, and making progress on its sustainability plan;
- Recruit and refer students, faculty, and industry to the program;
- Participate on the Steering Committee

For **Craig Attachments**, the following may apply (industry to check mark all that apply)

- ☒ Offer students opportunities for work-based learning, job shadowing, and/or internships/co-op opportunities related to the GIVE grant project
- ☒ Offer faculty/teachers opportunities for externships related to the GIVE grant project
- ☒ Communicate and collaborate with all partners about rules, expectations, and norms;
- ☒ Communicate and collaborate with school partners about curriculum and instruction;
- ☒ Establish a collaborative relationship with partnering agencies
- ☒ Complete paperwork, as requested, related to and associated with the GIVE grant program;
- ☒ Participate in the evaluation of the GIVE program at the local and state level;
- ☒ Assist the program in developing, implementing, and progressing its sustainability plan;
- ☒ Participate on the Steering Committee;
- ☐ Other: _____

Meetings

All major administrative decisions concerning policy and personnel of the GIVE program shall be brought to the Steering Committee. The Steering Committee consists of the project director, TCAT special industry coordinator, industry partners, a local K-12 education representative, and a South Central Tennessee Development District representative. Decisions will be reached by group consensus whenever possible and appropriate. The Steering Committee will meet no less than quarterly about key decisions and issues related to successful program implementation. The Program Director will oversee and make all day-to-day decisions, in consultation with the program staff, when appropriate, for the operation of the program. If partners cannot come to a mutual agreement, Tennessee College of Applied Technology-Pulaski will have final decision-making authority.

Craig (2)

Funding

Industry partners are not required to provide any funding or materials toward this grant project.

Duration

The agreement is for a period of 30 months from the execution of a grant contract with a preference to extend into a long-term affiliation to address skills gaps and local workforce needs.

Procedures for Modification and Termination

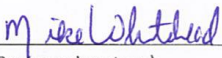
- The MOU may be modified, revised, extended, or renewed by mutual written consent of all parties, by the issuance of a written amendment, signed and dated by all parties. Submission of a revised MOU requires a program amendment to be submitted to the state coordinator for approval.
- Any party of the MOU may terminate their participation in this MOU by giving written notice of intent to terminate to each of the partners. In such case, termination by one or more of the parties to this MOU does not alter the terms or obligations of the other parties to this MOU.
- An individual partner's participation in the GIVE program may be terminated for non-compliance with the MOU provided the other parties provide written notice clearly outlining the reasons for termination.

Severance Clause

If any part of this agreement becomes unenforceable or illegal, then the agreement will continue in force, but the offending provision(s) shall be severed from the agreement and will have no effect on the remaining services agreed to and associated performance.

Signatures

All partners in this agreement sign to confirm their acceptance of its terms by their signature.


(Partner signature)
Mike Whitehead
President
TCAT-Pulaski
Date: 9/6/19


(Partner signature)
Partner Printed Name: Les Harding
Position: Vice President – USA Manufacturing
Industry Name: Craig Attachments
Date: September 5, 2019

(Craig (3)

Memorandum of Understanding
between
Tennessee College of Applied Technology-Pulaski
and
Marelli

This Memorandum of Understanding (MOU) sets forth the terms and understanding between Tennessee College of Applied Technology-Pulaski (TCAT) and Marelli who are providing services and/or support to the Governor's Investment in Vocational Education (GIVE) grant program.

Partner name: Tennessee College of Applied Technology-Pulaski
Partner representative: Mike Whitehead
Position: President
Address: 1233 East College Street, Pulaski, TN 38478
Telephone: 931-424-2420
E-mail: mike.whitehead@tcatpulaski.edu

Partner name: Marelli
Partner representative: Carrie mills
Position: sec manager
Address: 1701 Childress Road Lewisburg TN 37091
Telephone: 931-619-5427
E-mail: Carrie.mills@marelli.com

Purpose

The purpose of this MOU is to establish an agreement between the above mentioned parties concerning their respective roles and responsibilities for implementation of a GIVE grant project.

This agreement is to establish and coordinate joint processes and procedures for the provision of the GIVE program including the cultivation of potential industry partners, program promotion and marketing, and program evaluation.

GIVE Grant Program Vision and Overview

Since the MOU is intended to describe and detail how partners will contribute to the establishment and maintenance of the GIVE program, it is important that all partners to the MOU share a collective vision for the program and have a common understanding as to the scope and purpose of the program. The description provided under this section will serve as a critical framework for the program as it makes decisions on the implementation of the GIVE grant project:

Duties of Parties:

In this section, the responsibilities and agreements of each party are described separately:

For the lead agency, Tennessee College of Applied Technology-Pulaski, the responsibilities and agreements include:

- Serve as the fiscal agent for the grant;
- Provide needed support including office space, telephone use, and computer use for project staff;
- Provide classroom space and all other appropriate space to accommodate the program;
- Be responsible for purchasing necessary materials/supplies/equipment for designated components in accordance with the GIVE project budget;
- Support staff in trainings and professional development opportunities in areas related to programming and issues;
- Participate in the evaluation of the program at the local and state level;
- Complete paperwork related to any association with the program;
- Provide access to assessment and other available data for the purposes of program evaluation;
- Assist the program in developing, implementing, and making progress on its sustainability plan;
- Recruit and refer students, faculty, and industry to the program;
- Participate on the Steering Committee

For Marelli, the following may apply (industry to check mark all that apply)

- ☒ Offer students opportunities for work-based learning, job shadowing, and/or internships/co-op opportunities related to the GIVE grant project
- ☒ Offer faculty/teachers opportunities for externships related to the GIVE grant project
- ☒ Communicate and collaborate with all partners about rules, expectations, and norms;
- ☒ Communicate and collaborate with school partners about curriculum and instruction;
- ☒ Establish a collaborative relationship with partnering agencies
- ☒ Complete paperwork, as requested, related to and associated with the GIVE grant program;
- ☒ Participate in the evaluation of the GIVE program at the local and state level;
- ☐ Assist the program in developing, implementing, and progressing its sustainability plan;
- ☐ Participate on the Steering Committee;
- ☐ Other: _____

Meetings

All major administrative decisions concerning policy and personnel of the GIVE program shall be brought to the Steering Committee. The Steering Committee consists of the project director, TCAT special industry coordinator, industry partners, a local K-12 education representative, and a South Central Tennessee Development District representative. Decisions will be reached by group consensus whenever possible and appropriate. The Steering Committee will meet no less than quarterly about key decisions and issues related to successful program implementation. The Program Director will oversee and make all day-to-day decisions, in consultation with the program staff, when appropriate, for the operation of the program. If partners cannot come to a mutual agreement, Tennessee College of Applied Technology-Pulaski will have final decision-making authority.

Marelli (2)

Funding

Industry partners are not required to provide any funding or materials toward this grant project.

Duration

The agreement is for a period of 30 months from the execution of a grant contract with a preference to extend into a long-term affiliation to address skills gaps and local workforce needs.

Procedures for Modification and Termination

- The MOU may be modified, revised, extended, or renewed by mutual written consent of all parties, by the issuance of a written amendment, signed and dated by all parties. Submission of a revised MOU requires a program amendment to be submitted to the state coordinator for approval.
- Any party of the MOU may terminate their participation in this MOU by giving written notice of intent to terminate to each of the partners. In such case, termination by one or more of the parties to this MOU does not alter the terms or obligations of the other parties to this MOU.
- An individual partner's participation in the GIVE program may be terminated for non-compliance with the MOU provided the other parties provide written notice clearly outlining the reasons for termination.

Severance Clause

If any part of this agreement becomes unenforceable or illegal, then the agreement will continue in force, but the offending provision(s) shall be severed from the agreement and will have no effect on the remaining services agreed to and associated performance.

Signatures

All partners in this agreement sign to confirm their acceptance of its terms by their signature.

Mike Whitehead
(Partner signature)
Mike Whitehead
President
TCAT-Pulaski
Date: 9-6-19

Carrie mills
(Partner signature)
Partner Printed Name: Carrie mills
Position: manager
Industry Name: Marelli
Date: 9-5-19

Marelli(3)

Memorandum of Understanding
between
Tennessee College of Applied Technology-Pulaski
and
Talos Engineered Products

This Memorandum of Understanding (MOU) sets forth the terms and understanding between Tennessee College of Applied Technology-Pulaski (TCAT) and Talos Engineered Products who are providing services and/or support to the Governor's Investment in Vocational Education (GIVE) grant program.

Partner name: Tennessee College of Applied Technology-Pulaski
Partner representative: Mike Whitehead
Position: President
Address: 1233 East College Street, Pulaski, TN 38478
Telephone: 931-424-2420
E-mail: mike.whitehead@tcatpulaski.edu

Partner name: Talos Engineered Products
Partner representative: Marie LaLonde
Position: HR Business Partner
Address: 841 Industrial Drive Lewisburg, TN 37091
Telephone: (931) 270-7747 x110
E-mail: mlalonde@talosep.com

Purpose

The purpose of this MOU is to establish an agreement between the above mentioned parties concerning their respective roles and responsibilities for implementation of a GIVE grant project.

This agreement is to establish and coordinate joint processes and procedures for the provision of the GIVE program including the cultivation of potential industry partners, program promotion and marketing, and program evaluation.

GIVE Grant Program Vision and Overview

Since the MOU is intended to describe and detail how partners will contribute to the establishment and maintenance of the GIVE program, it is important that all partners to the MOU share a collective vision for the program and have a common understanding as to the scope and purpose of the program. The description provided under this section will serve as a critical framework for the program as it makes decisions on the implementation of the GIVE grant project:

Duties of Parties:

In this section, the responsibilities and agreements of each party are described separately:

For the **lead agency, Tennessee College of Applied Technology-Pulaski**, the responsibilities and agreements include:

- Serve as the fiscal agent for the grant;
- Provide needed support including office space, telephone use, and computer use for project staff;
- Provide classroom space and all other appropriate space to accommodate the program;
- Be responsible for purchasing necessary materials/supplies/equipment for designated components in accordance with the GIVE project budget;
- Support staff in trainings and professional development opportunities in areas related to programming and issues;
- Participate in the evaluation of the program at the local and state level;
- Complete paperwork related to any association with the program;
- Provide access to assessment and other available data for the purposes of program evaluation;
- Assist the program in developing, implementing, and making progress on its sustainability plan;
- Recruit and refer students, faculty, and industry to the program;
- Participate on the Steering Committee

For **Talos Engineered Products**, the following may apply (industry to check mark all that apply)

- ☐ Offer students opportunities for work-based learning, job shadowing, and/or internships/co-op opportunities related to the GIVE grant project
- ☐ Offer faculty/teachers opportunities for externships related to the GIVE grant project
- ☐ Communicate and collaborate with all partners about rules, expectations, and norms;
- ☐ Communicate and collaborate with school partners about curriculum and instruction;
- ☐ Establish a collaborative relationship with partnering agencies
- ☐ Complete paperwork, as requested, related to and associated with the GIVE grant program;
- ☐ Participate in the evaluation of the GIVE program at the local and state level;
- ☐ Assist the program in developing, implementing, and progressing its sustainability plan;
- ☐ Participate on the Steering Committee;
- ☐ Other: _____

Meetings

All major administrative decisions concerning policy and personnel of the GIVE program shall be brought to the Steering Committee. The Steering Committee consists of the project director, TCAT special industry coordinator, industry partners, a local K-12 education representative, and a South Central Tennessee Development District representative. Decisions will be reached by group consensus whenever possible and appropriate. The Steering Committee will meet no less than quarterly about key decisions and issues related to successful program implementation. The Program Director will oversee and make all day-to-day decisions, in consultation with the program staff, when appropriate, for the operation of the program. If partners cannot come to a mutual agreement, Tennessee College of Applied Technology-Pulaski will have final decision-making authority.

Talos(2)

Funding

Industry partners are not required to provide any funding or materials toward this grant project.

Duration

The agreement is for a period of 30 months from the execution of a grant contract with a preference to extend into a long-term affiliation to address skills gaps and local workforce needs.

Procedures for Modification and Termination

- The MOU may be modified, revised, extended, or renewed by mutual written consent of all parties, by the issuance of a written amendment, signed and dated by all parties. Submission of a revised MOU requires a program amendment to be submitted to the state coordinator for approval.
- Any party of the MOU may terminate their participation in this MOU by giving written notice of intent to terminate to each of the partners. In such case, termination by one or more of the parties to this MOU does not alter the terms or obligations of the other parties to this MOU.
- An individual partner's participation in the GIVE program may be terminated for non-compliance with the MOU provided the other parties provide written notice clearly outlining the reasons for termination.

Severance Clause

If any part of this agreement becomes unenforceable or illegal, then the agreement will continue in force, but the offending provision(s) shall be severed from the agreement and will have no effect on the remaining services agreed to and associated performance.

Signatures

All partners in this agreement sign to confirm their acceptance of its terms by their signature.

Mike Whitehead
(Partner signature)
Mike Whitehead
President
TCAT-Pulaski
Date: 9/6/19

Marie LaLonde
(Partner signature)
Partner Printed Name: Marie LaLonde
Position: HR Business Partner
Industry Name: Talos Engineered Products
Date: 9/5/19

Talos(3)

Exhibit F – Budget

GRANT BUDGET

GIVE Program Competitive Grant

The grant budget line-item amounts shall be applicable only to expenses incurred during the following applicable period:

BEGIN: October 24, 2019

END: April 25, 2022

POLICY 03 Object Line-item Reference	EXPENSE OBJECT LINE-ITEM CATEGORY ¹	GRANT CONTRACT	GRANTEE PARTICIPATION	TOTAL PROJECT
1,2	Salaries, Benefits & Taxes	\$ 137,146.10		\$ 137,146.10
4,15	Professional Fee, Grant & Award ²			\$ -
5,6,7,8,9,10	Supplies, Telephone, Postage & Shipping, Occupancy, Equipment, Rental & Maintenance, Printing & Publications			\$ -
11,12	Travel, Conferences & Meetings			\$ -
13	Interest ²			\$ -
14	Insurance			\$ -
16	Specific Assistance to Individuals			\$ -
17	Depreciation ²			\$ -
18	Other Non-Personnel ²			\$ -
20	Capital Purchase ²	\$ 149,000.00		\$ 149,000.00
22	Indirect Cost	\$ 24,000.00		\$ 24,000.00
24	In-Kind Expense			\$ -
25	GRAND TOTAL	\$ 310,146.10	\$ -	\$ 310,146.10

¹ Each expense object line-item shall be defined by the Department of Finance and Administration Policy 03, *Uniform Reporting Requirements and Cost Allocation Plans for Sub recipients of Federal and State Grant Monies*, Appendix A. (posted on the Internet at: www.state.tn.us/finance/act/documents/policy3.pdf).

² Applicable detail follows this page if line-item is funded.

GRANT BUDGET Line-Item Detail		
GIVE Program Competitive Grant		
The grant budget line-item amounts shall be applicable only to expenses incurred during the following applicable period: BEGIN: October 24, 2019 END: April 25, 2022		
POLICY 03 Object Line-item Reference	EXPENSE OBJECT LINE-ITEM CATEGORY ¹	GRANT CONTRACT NUMBER
1,2	Salaries, Benefits & Taxes	\$ 137,146.10
	Welding Adjunct Faculty salary (30 months)	\$ 54,600.00
	WBL Coordinator salary (30 months)	\$ 72,800.00
	Welding Adjunct Faculty payroll taxes (30 months)	\$ 4,176.90
	WBL Coordinator payroll taxes (30 months)	\$ 5,569.20
20	Capital Purchase	\$ 149,000.00
	Welding equipment	\$ 110,000.00
	Welding supplies (30 months)	\$ 9,000.00
	Space renovations	\$ 30,000.00
22	Indirect Cost	\$ 24,000.00
	Grant reporting, project evaluation & assessment	\$ 24,000.00
	GRAND TOTAL	\$ 310,146.10